

The Office of Compliance within EPA's Office of Enforcement and Compliance Assurance, in partnership with EPA Region 4, is developing a guidance for conducting CMOM audits. The document, entitled "Guide for Evaluating Capacity, Management, Operation, and Maintenance Programs at Sanitary Sewer Collection Systems" will also have a companion document for CMOM audits at wastewater treatment plants and will be available in late 2000. The documents will be available from the National Service Center for Publications (1-800-490-9198) and on the Chemical, Commercial Services, and Municipal Division homepage



## Evaluating POTW Capacity, Management, Operation, and Maintenance Programs

### *U.S. EPA Office of Compliance & Region 4*

#### **PURPOSE:**

EPA's Office of Compliance and Region 4 are developing tools to support an audit program that will evaluate compliance of all aspects of wastewater treatment plant and collection system capacity, management, operations, and maintenance (CMOM) programs. The products to be developed are based on Region 4's ongoing efforts in this area and will consist of guidance documents and inspection checklists in two volumes: one for sanitary sewer collection systems and one for wastewater treatment plants.

#### **BACKGROUND:**

Inadequate CMOM programs for sewage collection systems and wastewater treatment plants can pose a significant threat to receiving water quality and to public health. When facilities are not properly managed, operated, or maintained, NPDES permit limits can be exceeded at the associated treatment plants and sanitary sewer overflows (SSOs) can occur from the collection systems. As the sewer or treatment plant infrastructure deteriorates, the end result may be degraded or impaired water quality.

Because of the serious nature of these potential problems, EPA is increasing its involvement in this issue. Several related activities have already been initiated to address this problem, including the following:

- President Clinton issued a directive in May 1999, to develop a strong national regulation to prevent the estimated 40,000 annual sanitary sewer overflows that occur nationwide. EPA has developed draft regulations promoting national consistency in permitting and enforcement, effective sewer operation and maintenance principles, and public notification for SSOs with potential health or environmental dangers. The

regulation will be accompanied by regulatory guidance and a number of outreach activities planned by the Office of Water;

- The White House asked federal agencies to develop and implement a comprehensive plan that would revitalize the nation's commitment to water resources and build a new framework for watershed protection. The result was the Clean Water Action Plan, with key actions focusing on achieving cleaner water by strengthening public health protections, targeting watershed protection efforts at high priority areas, and providing communities with new resources to control polluted runoff and enhance natural resource stewardship;
- EPA's Office of Enforcement and Compliance Assurance has identified wet weather (in part, sanitary sewer overflows) as a FY '00/'01 Memorandum of Agreement (MOA) Priority;
- In May 2000, OECA issued the "Combined Sewer Overflow / Sanitary Sewer Overflow Compliance and Enforcement Strategy" which outlines the factors that serve as a basis for developing enforcement and compliance assistance targets relative to overflows from municipal collection systems.

#### **APPROACH:**

NPDES compliance inspectors' evaluations of collection systems and treatment plants involve determining compliance with permit conditions regarding proper operation and maintenance. These permit conditions are based on current regulatory language at 40 CFR 122.41(e) which states that: "The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit."

Until recently, the only guidance for inspectors making determinations regarding compliance with the requirement for proper operation and maintenance is provided in one section of the *NPDES Compliance Inspection Manual* (September 1994, EPA Doc. No. 300-B-09-014). This project is designed to complement and enhance the current information available to inspectors who evaluate systems for evidence of proper O&M.

To support this approach, we are drawing from the experiences of EPA Region 4, which has created the "Publically-Owned Treatment Works MOM Programs Project." Under this Project, the region asks permitted wastewater utilities, and any associated satellite utilities, to perform a detailed audit of the management, operation, and maintenance (MOM) programs associated with their facilities. Participants provide a report which includes the audit results, any improvements that can be made, and any schedules necessary to make those improvements. By self-disclosing any needed improvements, the participants can be eligible for significantly less, and in some cases eliminated, civil penalties while under a remediation schedule—often their own.

Region 4's approach is both thorough and pro-active. By drawing on the most important elements of the region's program in addition to existing NPDES inspection guidance and the field expertise in NPDES compliance monitoring, the CMOM guidance provides a comprehensive

framework for inspectors and the regulated community alike in determining whether operations and maintenance throughout the POTW is being appropriately executed.

## **PRODUCTS:**

The products will be based upon a three-phased approach for assessing MOM programs:

- The first phase is an overall evaluation of a facility's MOM program based upon a series of interviews with the facility's upper and middle managers.
- The second phase is an evaluation of the MOM program based upon field inspection of equipment and other resources, interviews with field personnel and first level supervisors, and observation of field crews carrying out the routine activities and functions.
- The last phase is the review of all the pertinent records and information management systems used by the facility to conduct its business and to develop performance indicators.

Development of these tools has tracked with the progress of the regulation being proposed by the Office of Wastewater Management, under the May 1999 Presidential directive regarding overflows. Until this regulation is final, EPA must follow the standard in the current regulatory language. The guidance and checklists are being developed with the standards being contemplated for the proposed regulation in mind and do not direct inspectors to address areas beyond those which are being included in the proposed rule. The guidance attempts to address the areas reflected in the rule, therefore providing a transitional approach for field inspection staff who will be required to monitor compliance with the rule once it is effective, as well as the regulated community.

## **TIME FRAME:**

The Office of Compliance and Region 4 anticipate that all the tools will be completed in FY'01.

## **REFERENCES:**

These tools are being used as points of departure for development:

- Region 4's *Guide for Conducting Evaluations of Municipal Wastewater Collection System Management, Operation and Maintenance Programs* (October 1996),
- *Region 4 Management, Operations, and Maintenance Work Group Standard Management Procedure: Results of EPA Region 4 Audit or Utility Self-Audit Review*, and
- *NPDES Compliance Inspection Manual, Chapter 4*, September 1994, EPA 300-B-09-014.

**For further information, contact Michelle Angelich - (202) 564-7033 or Roy Herwig - (404) 562-9758**